

HSP 65 - M.T.  
HSP 60 - RAT  
HSP 60 - HUMAN

1 6 25  
-----MAKTI AYDEEARRGL ERGLNALADA  
MLRLPTVLRQ MRPVSRALAP HLTRAYAKDV KFGADARALM LQGVDLLADA  
MLRLPTVFRQ MRPVSRVLAP HLTRAYAKDV KFGADARALM LQGVDLLADA

Consensus

-----AK-- ----AR--- --G---LADA

HSP 65 - M.T.  
HSP 60 - RAT  
HSP 60 - HUMAN

26 75  
VKVTLGPKGR NVVLEKKWGA PTITNDGVSI AKEIELEDPY EKIGAELVKE  
VAVTMGPKGR TVLIEQSWGS PKVTRDGVTV AKSIDLKDKY KNIGAKLVQD  
VAVTMGPKGR TVLIEQSWGS PKVTRDGVTV AKSIDLKDKY KNIGAKLVQD

Consensus

V-VT-GPKGR -V--E--WG- P--T-DGV-- AK-I-L-D-Y --IGA-LV--

6-7(31-52 AA)

HSP 65 - M.T.  
HSP 60 - RAT  
HSP 60 - HUMAN

76 125  
VAKKTDDVAG DGTTTATVLA QALVREGLRN VAAGANPLGL KRGIKAVEK  
VANNTNEEAG DGTTTATVLA RSIKEGFEX ISKGANPVEI RRGVLAVIDA  
VANNTNEEAG DGTTTATVLA RSIKEGFEX ISKGANPVEI RRGVLAVIDA

Consensus

VA--T---AG DGTTTATVLA -----EG--- ---GANP--- -RG---AV--

21 (121-136 AA)

HSP 65 - M.T.  
HSP 60 - RAT  
HSP 60 - HUMAN

126 174  
VTETLLKGAK EVETKEQIAA TAAISA.GDQ SIGDLIAEAM DKVGNVGVIT  
VLAELKKQSK PVTTPPEIAQ VATISANGDK DIGNIISDAM KKVGRKGVIT  
VLAELKKQSK PVTTPPEIAQ VATISANGDK EIGNIISDAM KKVGRKGVIT

Consensus

V---L-K--K -V-T-E-IA- -A-ISA-GD- -IG--I--AM -KVG--GVIT

HSP 65 - M.T.  
HSP 60 - RAT  
HSP 60 - HUMAN

175 224  
VEESNTFGLQ LELTEGMRFD RGYISGYFVT DPERQEAVLE DFYILLVSSK  
VKDGKTLNDE LEITEGMRFD RGYISPYFIN TSKGQKCEFO DAYVLLSEKK  
VKDGKTLNDE LEITEGMRFD RGYISPYFIN TSKGQKCEFO DAYVLLSEKK

Consensus

V----T---- LE--EGM-FD -GYIS-YF-- ----Q----- D-Y-LL---K

31 (181-196 AA)

36 (211-226 AA)

HSP 65 - M.T.  
HSP 60 - RAT  
HSP 60 - HUMAN

225 274  
VSTVKDLLPL LEKVIGAGKP LLIIAEDVEG EALSTLVVNK IRGTFKSVAV  
ISSVQSIVPA LEIANAHRKP LVIIAEDVDG EALSTLVNLR LKVGLOVVAV  
ISSIQSIVPA LEIANAHRKP LVIIAEDVDG EALSTLVNLR LKVGLOVVAV

Consensus

-S-----P- LE-----KP L-IIAEDV-G EALSTLV-N- -----VAV

40 (236-251 AA)

45 (265-280 AA)

Fig. 1

HSP 65 - M. T.  
HSP 60 - RAT  
HSP 60 - HUMAN

Consensus

275

KAPGFGDRRK AMLQDMAILT GGQVISEE.V GLTLENADLS LLGKARKVVV  
KAPGFGDNRK NQLKDMAIAT GGAVFGEEGL NLNLEDVQAH DLGKVGEVIV  
KAPGFGDNRK NQLKDMAIAT GGAVFGEEGL TLNLEDVQPH DLGKVGEVIV

323

KAPGFGD-RK --L-DMAI-T GG-V--EE-- -L-LE----- -LGK---V-V

HSP 65 - M. T.  
HSP 60 - RAT  
HSP 60 - HUMAN

Consensus

324

TKDETTIVEG AGDTDAIAGR VAQIRQEIEN SDSDYDREKL QERLAKLAGG  
TKDDAMLLKG KGDKAHIEKR IQEITEQLDI TTSEYEKEKL NERLAKLSDG  
TKDDAMLLKG KGDKAQIEKR IQEIIIEQLDV TTSEYEKEKL NERLAKLSDG

373

TKD-----G -GD---I--R ---I----- --S-Y--EKL -ERLAKL--G

59 (349-364 AA)

HSP 65 - M. T.  
HSP 60 - RAT  
HSP 60 - HUMAN

Consensus

374

VAVIKAGAAT EVELKERKHR IEDAVRNAKA AVEEGIVAGG GVTLLQAAPT  
VAVLKVGGS DVEVNEKKDR VTDALNATRA AVEEGIVLGG GCALLRCIPA  
VAVLKVGGS DVEVNEKKDR VTDALNATRA AVEEGIVLGG GCALLRCIPA

423

VAV-K-G--- -VE--E-K-R --DA-----A AVEEGIV-GG G--LL---P-

63 (373-388 AA)

HSP 65 - M. T.  
HSP 60 - RAT  
HSP 60 - HUMAN

Consensus

424

LDELK.LEGD EATGANIVKV ALEAPLKQIA FNSGLEPGVV AEKVRNLPAG  
LDSLKPANED QKIGIEIIKR ALKIPAMTIA KNAGVEGSLI VEKILQSSSE  
LDSLTPANED QKIGIEIIKR TLKIPAMTIA KNAGVEGSLI VEKIMQSSSE

472

LD-L-----D ---G--I-K- -L--P---IA -N-G-E---- -EK-----

HSP 65 - M. T.  
HSP 60 - RAT  
HSP 60 - HUMAN

Consensus

473

HGLNAQTGVY EDLLAAGVAD PVKVTRSALQ NAASIAGLFL TTEAVVADKP  
VGYDAMLGDF VNMVEKGIID PTKVVRTALL DAAGVAPLLT TAEAVVTEIP  
VGYDAMAGDF VNMVEKGIID PTKVVRTALL DAAGVASLLT TAEVVVTEIP

522

-G--A--G-- -----G--D P-KV-R-AL- -AA--A-L-- T-E-VV---P

84 (499-514 AA)

HSP 65 - M. T.  
HSP 60 - RAT  
HSP 60 - HUMAN

Consensus

523

540

EKEKASVPGG GDMGGMDF-- ----  
KEEKD..PGM GAMGGMGGGM GGGMF  
KEEKD..PGM GAMGGMGGGM GGGMF

--EK---PG- G-MGGM-----

Fig. 1(continued)

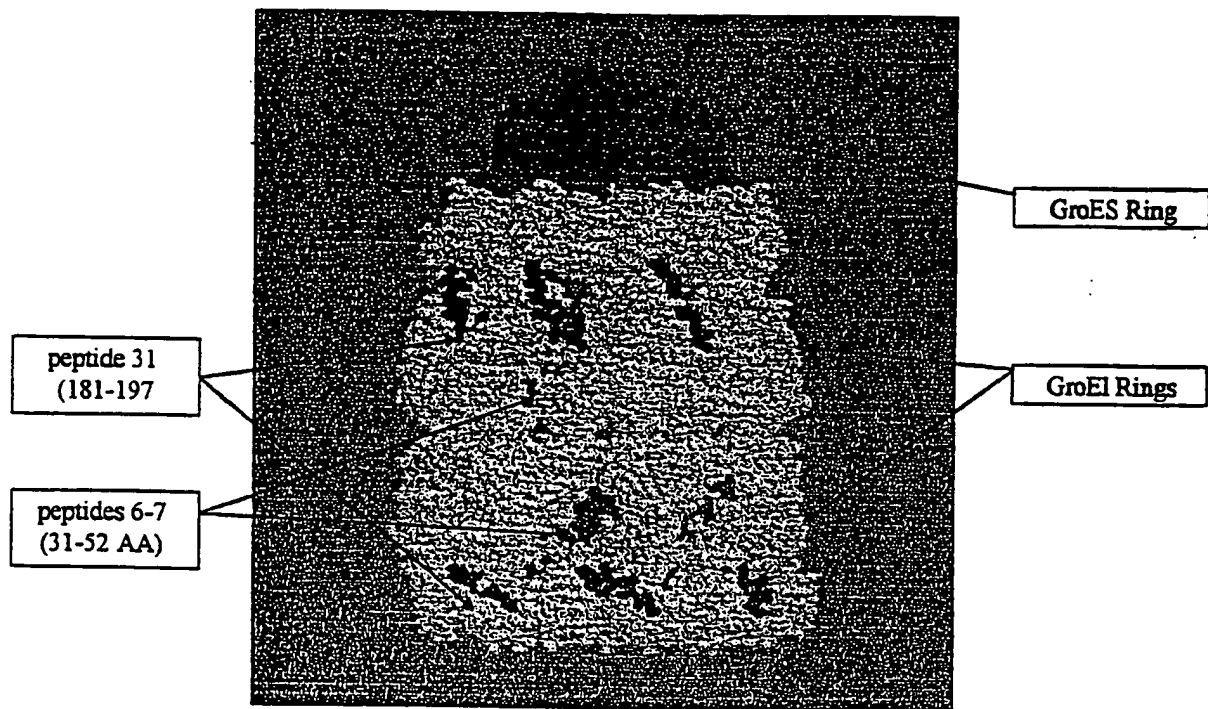
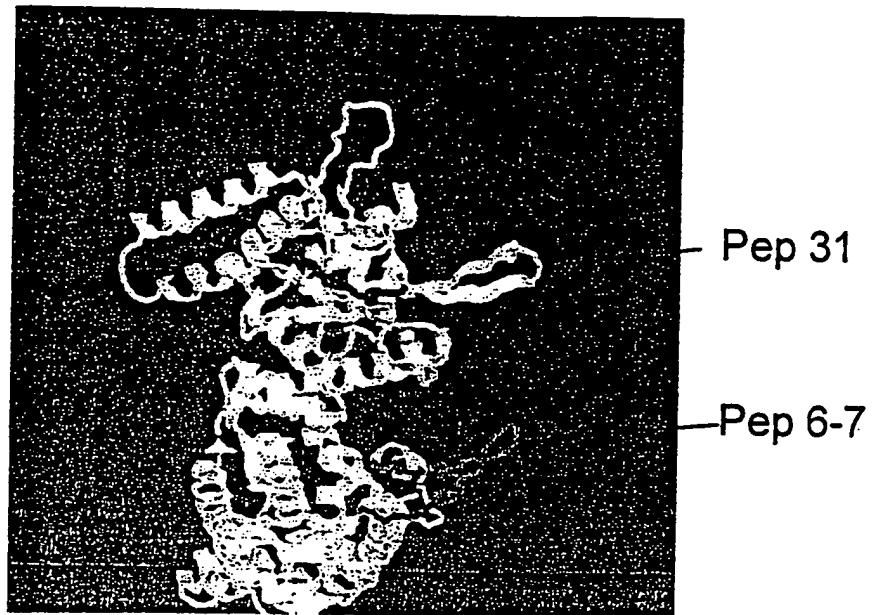
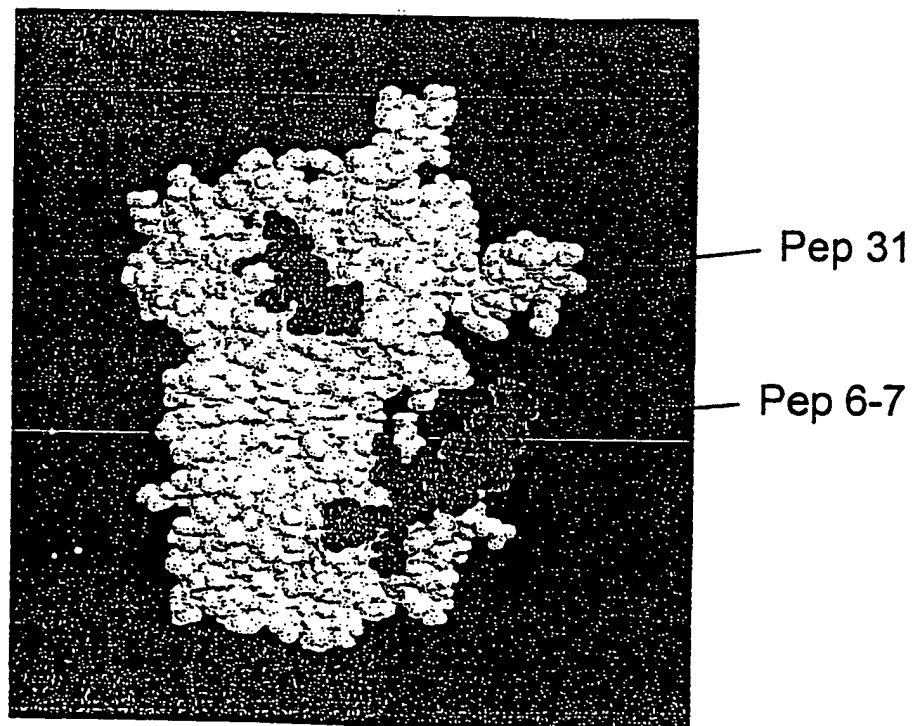


Fig. 2



**Fig. 3A**



**Fig. 3B**

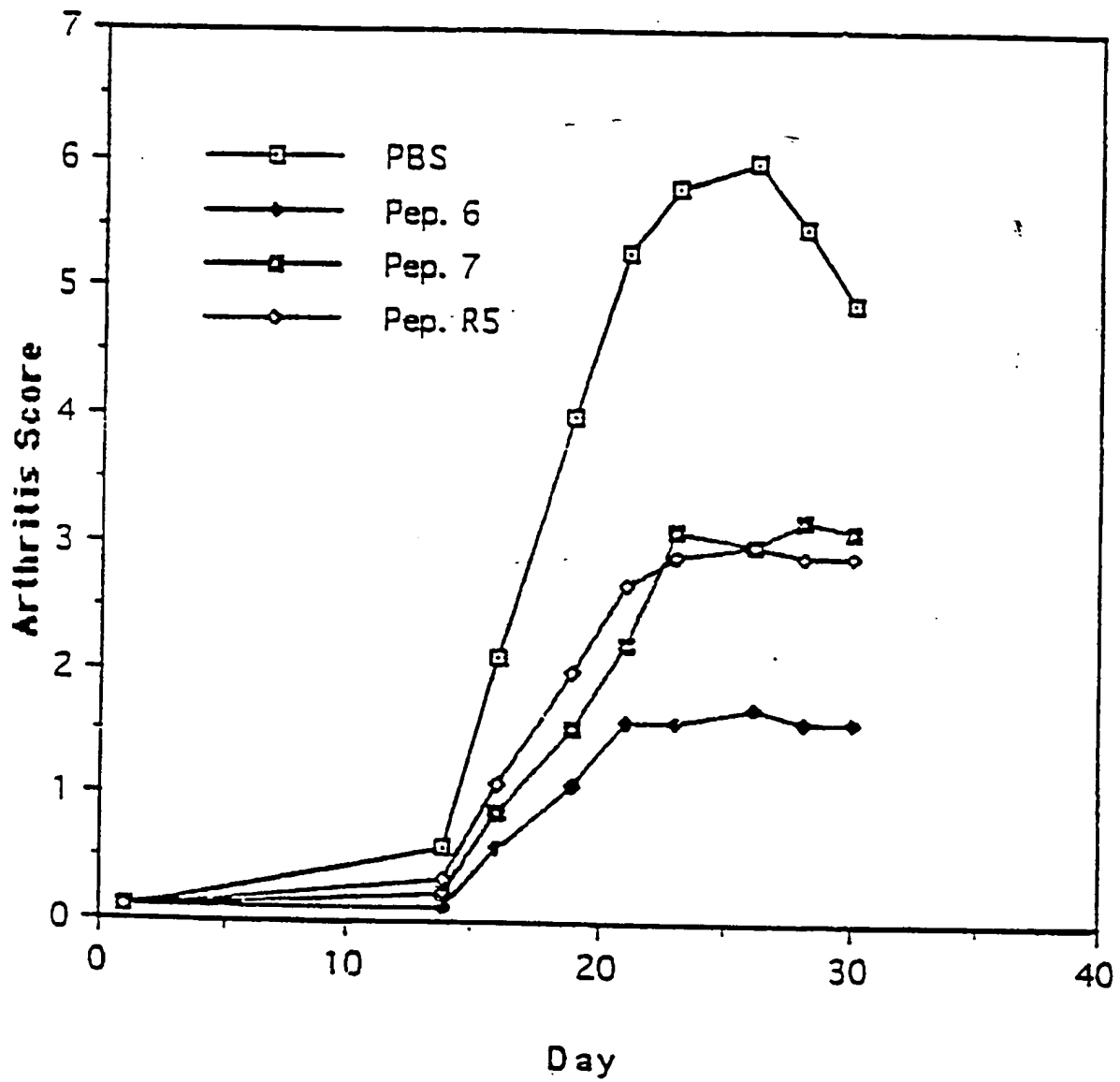


Fig. 4

# The "Protective" Motif

MT	HSP Peptide 6- (31-46)	G P K G R N <u>V</u> <u>V</u> L <u>E</u> K K <u>W</u> <u>G</u> A <u>P</u>
MT	HSP Peptide 7- (37-52)	<u>V</u> <u>V</u> L <u>E</u> K K <u>W</u> <u>G</u> A <u>P</u> T I T N D G
Rat	HSP Peptide 5- (36-55)	T <u>V</u> I I <u>E</u> Q S <u>W</u> <u>G</u> S <u>P</u> K V T K D G V T V

Common Motif

V = E - - W G - P

Fig. 5



Fig. 6